

AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT			1. CONTRACT ID CODE		PAGE OF PAGES 1 2		
2. AMENDMENT/MODIFICATION NO. S001		3. EFFECTIVE DATE 5/4/06		4. REQUISITION/PURCHASE REQ. NO.		5. PROJECT NO. (If applicable)	
6. ISSUED BY CODE U.S. Department of Energy Chicago Office 9800 South Cass Avenue Argonne, IL 60439		7. ADMINISTERED BY (If other than Item 6)		Code			
8. NAME AND ADDRESS OF CONTRACTOR (No. street, county, State and ZIP Code) To All Prospective Offerors				(✓) ✓		9.A. AMENDMENT OF SOLICITATION NO. DE-RP02-06H11357	
						9.B. DATED (SEE ITEM 11) 04/19/06	
						10.A. MODIFICATION OF Contract/Order NO.	
						10.B. DATED (SEE ITEM 13)	
CODE		FACILITY CODE					
11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS							

☒ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☒ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods: (a) By completing Items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

N/A

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS, IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.	
Check One	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:
	D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor ☐ is not, ☐ is required to sign this document and return copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

This Request For Proposal is amended as follows:

See Page 2

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)	
15B. CONTRACTOR/OFFEROR		16B. UNITED STATES OF AMERICA	
15C. DATE SIGNED		16C. DATE SIGNED	
_____ (Signature of person authorized to sign)		BY _____ (Signature of Contracting Officer)	

14. DESCRIPTION OF AMENDMENT/MODIFICATION

- a. Section C – DESCRIPTION/SPECS./WORK STATEMENT, is deleted in its entirety and replaced with Attachment I of this modification, entitled, Part I, Section C – DESCRIPTION/SPECS./WORK STATEMENT. Part I, Section C.4(b)(2) – STATEMENT OF WORK has been completely revised to reflect changes to the Laboratory Business Lines. No other changes were made to Section C of the RFP; and
- b. Part III, Section J, LIST OF ATTACHMENTS, Attachment No. J.9, Appendix I – DOE Directives/List B, is deleted in its entirety and replaced with Attachment II of this modification entitled, Part III, Section J, LIST OF ATTACHMENTS, Attachment No. J.9, Appendix I – DOE Directives/List B, and reflects the following changes:

ES&H

- i.) M 231.1-1A chg 1, the date is changed from 8/19/03 to 9/9/04.
- ii.) M 213.1-2 is changed to M231.1-2 to correct a typographical error.
- iii.) O 450.1 Change 1, is updated to include Change 2.
- iv.) DOE-STD 1090-2004, Hoisting and Rigging Standard is added

Safeguards and Security

- i.) M 205.1-2, the word “Manual” is added to the end of the title.
- ii.) M 470.4-1, is updated to include Change 1.
- iii.) M 470.4-2, is updated to include Change 1.
- iv.) M 470.4-3, is updated to include Change 1.

Financial Management

- i.) O224.3 is deleted.

Other

- i.) N 350.2 is deleted.
- li) N 351.1 is added
- ii.) O 413.2A is changed to O.413.2B.

END OF AMENDMENT

PART I

SECTION C

DESCRIPTION/SPECS./WORK STATEMENT

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PART I

SECTION C - DESCRIPTION/SPECS./WORK STATEMENT

C.1 – INTRODUCTION

This Performance-Based Management Contract (PBMC) is for the management and operation of the Argonne National Laboratory (ANL) (the Laboratory). The Contractor shall, in accordance with the provisions of this contract, accomplish the missions and programs assigned by the U.S. Department of Energy (DOE) and manage and operate the Laboratory. The Laboratory is one of the DOE's Office of Science (SC) multi-program laboratories. The Laboratory is a Federally Funded Research and Development Center (FFRDC) established in accordance with the Federal Acquisition Regulation (FAR) Part 35 and operated under this management and operating (M&O) contract, as defined in FAR 17.6 and DEAR 917.6.

This contract reflects the Department's effort to enable the Contractor to achieve more highly effective and efficient management of the Laboratory, outstanding science and technology results in a safe and secure environment, more cost effective operations, and enhanced Contractor accountability. Toward this end, this contract establishes a process for minimizing the use of unnecessary DOE orders by tailoring existing and new orders that will enable the Contractor to propose alternate standards, which rely primarily on state and federal laws and regulations, and management processes based on national standards, certified systems and best business practices. Contractor managers shall be held more accountable for maintaining risk mitigation as Laboratory processes and assurance models change.

This contract reflects the application of performance-based contracting approaches and techniques which emphasize results/outcomes and minimize "how to" performance descriptions. The Contractor has the responsibility for total performance under the contract, including determining the specific methods for accomplishing the work effort, performing quality control, and assuming accountability for accomplishing the work under the contract. Accordingly, this PBMC provides flexibility, within the terms and conditions of the contract, to the Contractor in managing and operating the Laboratory.

Desired results of this contract include improved Contractor operational efficiencies, allocations of Contractor resources to ensure effective planning, direction, and implementation of mission work, and streamlined and more effective federal line management focused on a system-based approach to federal oversight with increased reliance on the results obtained from certified, nationally recognized experts and other independent reviewers. Moreover, science and technology have improved peer review metrics and incentives to achieve extraordinary results.

Under this PBMC, it is the Contractor's responsibility to develop and implement innovative approaches and adopt practices that foster continuous improvement in accomplishing the mission of the Laboratory. DOE expects the Contractor to produce effective and efficient management structures, systems, and operations that maintain high levels of quality and safety in accomplishing the work required under this contract, and that to the extent practicable and appropriate, rely on national, commercial, and industrial standards that can be verified and certified by independent, nationally recognized experts and other independent reviewers. The Contractor shall conduct all work in a manner that optimizes productivity, minimizes waste, and fully complies with all applicable laws, regulations, and terms and conditions of the contract.

To the maximum extent practical, this PBMC shall:

- (a) Describe the requirements in terms of outcome or results required rather than the methods of performance of the work;
- (b) Use a limited number of systems-based measurable performance standards (i.e., terms of quality, timeliness, quantity, etc.) to drive improved performance and increased effective and efficient management of the Laboratory;
- (c) Provide for appropriate financial incentives (e.g., fee) when performance standards and contract requirements are achieved;
- (d) Specify procedures for reduction of fee when services are not performed or do not meet contract requirements; and
- (e) Include non-financial performance incentives where appropriate.

C.2 – IMPLEMENTATION OF DOE'S MISSION FOR ANL

The Contractor shall develop a compelling plan to implement the DOE's SC strategic mission for the Laboratory, as defined below in C.4(b)(1) "Laboratory Mission." Within this Plan, the Contractor will map the Laboratory's core competencies to this Laboratory mission. The Contractor will highlight the unique roles the Laboratory fills in SC's capability to accomplish its missions and, more broadly, that of the Department. Upon approval by the Department, the Plan shall be updated in accordance with instructions to be issued by the Argonne Site Office (ASO) Manager.

The Performance Evaluation and Measurement Plan, as called for within the clause entitled, "Standards of Contractor Performance Evaluation", identifies performance goals, objectives, measures, and targets which are updated and agreed upon by the Parties annually, as standards against which the Contractor's overall performance of scientific, technical, operational, and/or managerial obligations under this contract shall be assessed.

C.3 - PERFORMANCE EXPECTATIONS, OBJECTIVES, AND MEASURES

C.3.1 - Core Expectations

C.3.1.1 - General

The relationship between DOE and its national laboratory management and operating contractors is designed to bring best practices for research and development to bear on the Department's missions. Through application of these best practices, the Department seeks to assure both outstanding programmatic and operational performance of today's research programs and leadership to assure the relevance to DOE's mission needs, the productivity and quality of its programs to lead the world in meeting tomorrow's needs. Accordingly, DOE has substantial expectations of the Contractor in the areas of: program delivery and mission accomplishment; laboratory stewardship; and excellence in laboratory operations and financial management.

C.3.1.2 - Program Development and Mission Accomplishment

The Contractor is expected to provide the highest quality of planning, management, and execution of assigned research and development programs. The Contractor is expected to execute assigned programs so as to achieve the greatest possible impact on DOE's mission objectives, to aggressively manage the Laboratory's science and technology capabilities and intellectual property to meet these objectives, and to initiate innovative concepts and research proposals that are in concert with DOE missions. The Contractor shall propose work that will advance DOE's mission objectives and that is aligned to Laboratory capabilities. The Contractor shall strive to meet the highest standards of scientific quality and productivity, "on-time, on budget, as-promised" delivery of program deliverables, and first-rate service to the research community through user facility operation.

The Contractor is expected to demonstrate benefit to the nation from R&D investments by transferring technology to the private sector and supporting excellence in science and mathematics education consistent with achieving continuous progress towards DOE's core missions.

C.3.1.3 - Laboratory Stewardship

The Contractor is expected to be an active partner with DOE in assuring that the Laboratory is renewed and enhanced to meet future mission needs. Within the constraints of available resources and other Contract requirements, the Contractor, in partnership with DOE, shall:

- (a) Maintain an understanding of DOE's evolving Laboratory vision and long-term strategic plan. Address the co-evolution of Laboratory capabilities to meet anticipated DOE and national needs.
- (b) Attract, develop, and retain an outstanding work force, with the skills and capabilities to meet DOE's evolving mission needs.
- (c) Renew and enhance research facilities and equipment so that the Laboratory remains at the state-of-the-art over time and is well-positioned to meet future DOE needs.
- (d) Build and maintain a financially viable portfolio of research programs that generates the resources required to renew and enhance Laboratory research capabilities over time.
- (e) Maintain a vibrant relationship with the broader research community, to enhance the intellectual vitality and research relevance of the Laboratory, and to bring the best possible capabilities to bear on DOE mission needs through partnerships.
- (f) Build a positive, supportive relationship founded on openness and trust with the community and region in which the Laboratory is located.

C.3.1.4 Operational and Financial Management Excellence

The Contractor is expected to effectively and efficiently manage and operate the Laboratory through best-in-class management practices designed to foster world-class research while assuring the protection and proper maintenance of DOE research and information assets, the health and safety of Laboratory staff and the public, and the environment. The Contractor is expected to operate the Laboratory so as to meet all applicable laws, regulations, and requirements. The Contractor is expected to

manage the Laboratory cost-effectively, while providing the greatest possible research output per dollar of research investment, and, accordingly, to develop and deploy management systems and practices that are designed to enhance research quality, productivity, and mission accomplishment consistent with meeting operational requirements.

C.3.2 - Performance Evaluation Expectations

The performance expectations of this contract are broadly set forth in this Section and reflect the DOE's minimum needs and expectations for Contractor performance. Specific performance work statements, performance standards (measures applied to results/outputs), acceptable performance levels (performance expectations), acceptable quality levels (permissible deviations from performance expectations), and related incentives shall be established annually, or at other such intervals determined by the DOE to be appropriate. The related incentives may be monetary, or where monetary incentives are not desirable or considered effective, the Contractor's performance may be used as a factor which directly affects the past performance report card, or a factor in a decision to reduce or increase DOE oversight or Contractor reporting, as appropriate.

In performance under this contract, the Contractor shall be evaluated within the following general performance goals and expectations:

- (a) Science and Technology (S&T) - The Contractor will deliver innovative, forefront science and technology aligned with DOE strategic goals in a safe, environmentally sound, and efficient manner, and will conceive, design, construct, and operate world-class user facilities.
 - (1) Mission Accomplishment (Quality and Productivity of R&D): The Contractor shall produce high-quality, original, and creative scientific results that demonstrate sustained scientific and technological progress and impact, while receiving appropriate external recognition of accomplishments. The Contractor shall also contribute to overall research and development goals of the Department and its customers. Important performance factors for the research and development are: overall

productivity/output; impact including the significance of the R&D; leadership including recognition of Science and Technology accomplishments; and delivery including timeliness such as meeting milestones, goals, and other commitments.

- (2) Construction and Operation of Research Facilities: The Contractor shall develop, construct and operate research facilities and equipment that are needed to insure the Laboratory can meet its S&T missions today and in the future, while effectively and efficiently maintaining current S&T facilities and equipment and providing effective, efficient operation of user facilities to maximize the value of facilities. Important performance factors are: meeting construction schedules, budgets, performance specifications and objectives; operating the facilities reliably, cost effectively, and ensuring that the facilities are available when needed; providing high utilization by providing a science and technology foundation to maximize the value of the facility; and leveraging the facilities by making them available for other customers.
 - (3) Project/Program Management: The Contractor shall provide for effective and efficient stewardship of resources and capabilities, through expert planning, delivery, and risk management. Important performance factors are: establishing a Laboratory vision that includes maintaining key competencies to support research programs and making quality hires; planning including high quality research plans, adequate consideration of technical risks, success in identifying and avoiding/overcoming technical problems and the ability to take advantage of new opportunities; and linking financial data to effective decision making and redirecting resources/projects in response to changing conditions.
- (b) Contractor Leadership/Stewardship - The Contractor shall provide for the effective and efficient management and operation of the Laboratory through a strategic vision and effective planning to assure the Laboratory mission is accomplished. Important performance factors are: Laboratory-wide strategic vision and effective planning

including the creation of partnerships and alliances, selection of Laboratory priorities and culture, educational programs, technology transfers, and developing a working relationship with the local community; responsiveness and accountability; and corporate involvement /contributions including joint appointments, innovative financing proposals, infrastructure support and an overall investment in the success of the Laboratory.

C.3.3 - Performance Objectives and Measures

The results-oriented performance objectives of this contract are stated in the Performance Evaluation and Measurement Plan (PEMP)(Appendix B), and/or in the Work Authorization Directives issued annually in accordance with the special clause entitled, "Long-Range Planning, Program Development and Budgetary Administration". The Contractor shall develop a five-year Plan for the overall direction of the Laboratory and for the accomplishment of these objectives. The Plan shall be actively maintained and annually updated in accordance with instructions issued by the DOE Site Manager. The objectives shall be accomplished within an overall framework of management and operational performance requirements and standards contained elsewhere in this contract. To the maximum extent practicable, these requirements and standards have also been structured to reflect performance-based contracting concepts, including the clause entitled, "Application of DOE Contractor Requirement Documents", which permits the Contractor to propose to the Contracting Officer alternative and/or tailored approaches based on national, commercial or industrial standards and best business practices to meet the outcomes desired by the Government.

DOE's Quality Assurance/Surveillance Plan (QASP) for evaluating the Contractor's performance under the contract shall consist primarily of the PEMP as called for within the Part II, Section I. The QASP establishes the process DOE shall use to ensure that the Contractor has performed in accordance with the performance standards and expectations. The QASP shall summarize the performance standards, expectations and acceptable quality levels; describe how performance will be monitored and measured; describe how the results will be evaluated; and state how the results will affect contract payment.

The Contractor shall develop and implement a Laboratory assurance process, acceptable to the Contracting Officer, which

provides reasonable assurance that the objectives of the Contractor's management systems are being accomplished and that the systems and controls will be effective and efficient. The Contractor's assurance process shall reflect an understanding of the risks, maintain mechanisms for eliminating or mitigating the risks, and maintain a process to ensure that the management systems and their attendant assurance process(es) meet contract requirements.

C.4 - STATEMENT OF WORK

(a) General.

The Contractor shall, in accordance with the provisions of this contract, provide the intellectual leadership and management expertise necessary and appropriate to manage, operate, and staff the Laboratory; to accomplish the research mission and roles assigned by DOE to the Laboratory; and to perform the work described in this Statement of Work (SOW). The DOE research activities are assigned through strategic planning, program coordination, and cooperation between the Laboratory and DOE.

Because the research activities of the Laboratory are dynamic, this SOW is not intended to be all inclusive or restrictive, but is intended to provide a broad framework and general scope of the work to be performed at the Laboratory during the term of the contract. This SOW does not represent a commitment to, or imply funding for, specific projects or programs. All projects and programs will be authorized individually by DOE and/or other work sponsors in accordance with the provisions of this contract.

All work under this contract shall be conducted in a manner that will protect the environment and assure the safety and health of employees and the public. This objective is to be accomplished by the Laboratory implementing an Integrated Safety Management System that includes an Environmental Management System. In performing the contract work, the Laboratory shall implement appropriate program and project management systems to track progress and pursue cost effectiveness in work activities; develop integrated plans and schedules to achieve program objectives, incorporating input from DOE and stakeholders; maintain sufficient technical expertise to manage activities and projects throughout the life of a program; maintain Laboratory facilities and infrastructure as necessary to accomplish assigned missions; and utilize appropriate technologies and management systems to improve cost efficiency and performance.

(b) Mission and Major Programs

(1) Laboratory Mission. In support of major DOE sponsor organizations (see C.4(b)(3)) that evaluate the Laboratory's program performance, the central mission of the Laboratory is to provide scientific leadership needed to carry out the world class science and technological innovation to support the programs and missions of SC and DOE. The Laboratory's mission addresses four distinct goals:

- To perform the highest quality multi-disciplinary research in the basic energy sciences, nuclear physics, high energy physics, biological and environmental research, fusion energy sciences, computational and technology research, and other related sciences in a manner that ensures employee and public safety and protection of the environment;
- To develop, maintain, and operate unique national experimental facilities that are available to qualified investigators;
- To educate and train future generations of scientists and engineers to promote the Department's national science and education goals; and
- To transfer knowledge and technological innovations and foster productive relationships among Laboratory research programs, universities, and industry in order to promote national economic competitiveness.

(2) Laboratory Business Lines. In support of the DOE mission, the Laboratory will pursue a number of distinct business lines that include:

(i) Materials Science

The Contractor shall perform materials synthesis and characterization through the use of photon, neutron, electron, and ion based materials analysis facilities. The Contractor shall perform research to obtain an understanding of materials structure for energy, health, and national security applications, including down to the nanoscale level. The facilities available for this research include the Advanced Photon Source, Center for Nanoscale Materials, Electron Microscopy Center, and the Intense Pulse Neutron Source.

The Contractor shall construct and operate a broad range of nationally available user facilities for characterizing materials, together with an integrated approach for allowing access to these

facilities by internal ANL organizations as well as external collaborations. Some distinguishing features include:

- Research Capabilities
 - Biological & Inorganic materials synthesis and characterization
 - Hard X-ray Nanoscale Research
- Facilities:
 - X-rays (Advanced Photon Source [APS])
 - Center for Nanoscale Materials [CNM])
 - Neutrons (Intense Pulsed Neutron Source [IPNS])
 - Electrons (Electron Microscopy Center [EMC])

(ii) Mathematics and Computer Sciences

The Contractor shall provide computational tools to advance the forefront of science. The Contractor shall participate in developing a world-leading computing expertise and software systems to power all major computational platforms. This includes serving as a leader in the fundamental architecture for massively parallel computer systems and tying together computer science, advanced architecture research, and applied modeling and simulation to carry out leading-edge research. This effort requires extensive collaborations with industry, other national laboratories, such as Oak Ridge National Laboratory for the Leadership Class Computing for open scientific research, and universities.

ANL's distinguishing Research Capabilities in this area include:

- Advanced Architecture Research
- Applied Modeling and Simulation
- Computational Mathematics

(iii) Advanced Biosciences

The Contractor shall perform research and development work to increase the U.S. bio-defense capabilities, develop new energy sources and environmental technologies, and advance medical sciences. The Contractor shall construct and operate a broad range of nationally available user facilities for characterizing biological materials, together with an integrated approach for allowing access to these facilities by internal ANL organizations as

well as external collaborations. This work will include optimizing crystal growth of proteins and other biomolecules, and automation of x-ray scattering beam lines. Distinguishing features include:

- Research Capabilities
 - Imaging
 - Structural Biology/Genomics
 - Bioinformatics
- Facilities:
 - University of Chicago Structural Biology Center

(iv) Fundamental Physics

The Contractor shall maintain a fundamental nuclear physics program to understand fundamental matter and forces and master connections between high energy and nuclear physics, astrophysics and cosmology. The Contractor shall maintain a lead role in experimental theoretical physics including nuclear structure and astrophysics with stable beams, laser trapping of individual atoms, and high energy physics experiments and theory. This work will be based on an internationally leading in-house low-energy nuclear physics program centered on the Argonne Tandem Linear Accelerator System (ATLAS) with strong ties to DOE experimental nuclear physics programs and to nationally ranked particle astrophysics and nuclear astrophysics programs. Distinguishing features include:

- Research Capabilities
 - Nuclear Structure and astrophysics with stable beams
 - Laser trapping of individual atoms
 - High energy physics; experiments and theory
- Facilities
- Argonne Tandem-Linac Accelerator System

(v) Energy and Environmental Science and Technology

The Contractor shall advance approaches to the integration of economics, computing, engineering and sciences. This includes integrated approaches to energy and environmental challenges, advance the frontiers of large-scale, systems-level modeling, and

simulations as applied to energy and environmental technologies, and provide the support for next generation nuclear reactor designs.

The Contractor shall assist DOE in responding to a broad range of problems associated with the nuclear fuel cycle, at levels ranging from the basic science of fuel rod design and separation chemistry to the complex of problems related to reactor design and the closed fuel cycle. Distinguishing features include:

- Research Capabilities
 - Nuclear fuel cycle & reactor design
 - Transportation science
 - Integration of Economics, Computing, engineering and sciences
- Facilities
 - Cloud and solar radiation test-bed
 - Engine Research Facility for Diesels
 - Advanced Powertrain Test facility for hybrid-vehicles
 - Electrochemical Analysis and Diagnostics Laboratory

(vi) Accelerator Design

The Contractor shall maintain the DOE lead in accelerator design, construction, and operations. The Contractor shall construct and operate entire accelerator complexes and user facilities. This includes maintaining the leadership for development of synchrotron operations, the application of materials science for superconducting Radio Frequency cavities and superconducting ion accelerator technology, new classes and performance standards for RF cavities, the construction of high-brightness electron guns, accelerator R&D for low velocity beams, as well as the application of engineering and project management capabilities. Distinguishing Research Capabilities include:

- Accelerator R&D for low velocity beams
- Superconducting RF Design
- Synchrotron Radiation Sources

(vii) National Security

The Contractor shall serve as a national leader in energy infrastructure risk mitigation, detection and deterrence of radioactive threats, and bio-micro-arrays for agent detection. The objective of this program is to reduce the homeland security threats. Distinguishing Research Capabilities in this area include:

- Infrastructure Assurance
- Nuclear Risk Mitigation
- Bioagent Detection

- (3) Primary Program Sponsors. Work under this contract includes scientific and technical programs sponsored by major DOE organizations. The primary DOE sponsor is:

Office of Science

Other DOE organizations that sponsor work at the Laboratory include:

Nuclear Energy, Science and Technology
Energy Efficiency and Renewable Energy
Fossil Energy
Environmental Management
National Nuclear Security Administration
Security and Emergency Operations
Counterintelligence
Environment, Safety and Health

Additionally, the Contractor may be authorized to pursue other DOE and non-DOE missions [most notably those of the Department of Homeland Security (DHS), Nuclear Regulatory Commission (NRC), Department of Agriculture (DOA), Department of Defense (DOD), the National Institutes of Health (NIH), and the National Aeronautics Space Administration (NASA)]. The DOE derives the benefits from the Laboratory's mission accomplishments and the development and utilization of the Laboratory's core competencies which are supported by this work.

- (4) Office of Science Programs.

The Laboratory is dedicated to basic and applied investigations in a multitude of scientific disciplines. A summary of current Laboratory programs follows. Descriptions of major programs are updated periodically in the form of business plans or institutional plans.

- (i) Basic Energy Sciences. The Contractor shall conduct forefront research in broad areas of materials sciences, chemical sciences,

geosciences, and biosciences. Programs that take advantage of the unique scientific user facilities in materials sciences and related disciplines available at the Laboratory - for example, the Advanced Photon Source and the Intense Pulsed Neutron Source, the Center for Nanoscale Materials – are to be encouraged. The Contractor shall manage all aspects of designated scientific user facilities, which serve the needs of academic, industrial, and government scientists.

- (ii) **Biological and Environmental Research.** The Contractor shall conduct programs on structural biology, structural and functional genomics, biophysics, bioinformatics, molecular and cellular biology, climate, atmospheric and carbon sciences, and environmental remediation science and bioremediation that build on the unique facilities and expertise available at the Laboratory.
- (iii) **Nuclear Physics.** The Contractor shall conduct work to: perform frontier research in theoretical and experimental nuclear physics; build, maintain and operate state of the art user facilities for nuclear physics; perform research and development work in accelerator science, experimental detector design and computing relevant to nuclear physics; operate the ATLAS facility and participate in the next generation of accelerators for particle research such as the Spallation Neutron Source and the Rare Isotope Accelerator and carry out construction projects in Nuclear Physics areas as assigned. In pursuit of this program of Nuclear Physics work, the Contractor operates large accelerator-based user facilities (such as the ATLAS facility) and carries on an in-house program of research in theoretical and experimental nuclear physics.
- (iv) **High Energy Physics.** The Contractor shall conduct work to: perform frontier research in theoretical and experimental high energy physics; build, maintain and operate state of the art experimental facilities for high energy physics; perform research and development work in accelerator science, experimental detector design and computing relevant to high energy physics; support operations of existing DOE High Energy Physics experiments and carry out construction projects in High Energy Physics areas as assigned. In pursuit of this program of High Energy Physics, the Contractor carries on an in-house program of research in theoretical and experimental particle and high energy physics.

- (v) Fusion Energy Sciences. The Contractor shall conduct programs for the development of fusion energy technology consistent with the unique facilities and expertise available at the Laboratory. The main areas of the program are: plasma-facing components, power extraction studies, fusion power plant system studies, materials research, and plasma interactions studies. The Contractor will work cooperatively with other institutions in the U.S. which are involved in fusion technology development.
- (vi) Computational and Technology Research. The Contractor shall conduct computational research including applied mathematical sciences, computer sciences, and computational sciences. The research shall emphasize both excellence and relevance, such that advances in mathematics and computer science help the Department to solve its most pressing mission-related problems. Teaming and collaboration, which bring different skills together to focus on common problems, shall be actively encouraged. To this end, the Contractor shall create and maintain an environment that reinforces collaboration with the best researchers, irrespective of where they are located, be that within the Laboratory, at other laboratories, or at universities, within the U.S. or around the world.

The Contractor shall devote appropriate attention to the management of information systems that support major experiments and other scientific data-intensive resources so as to assure their timeliness, security, utility, cost-effectiveness, and responsiveness to customers.

(5) Environmental Management

The Contractor shall plan and execute environmental restoration activities at the Laboratory in accordance with DOE program goals, initiatives, strategies, guidance letters, and approved project baselines in areas such as: (i) Environmental remediation and facility deactivation, decommissioning, decontamination, and demolition in accordance with required permits and with DOE Orders; and (ii) Research and development tasks to support technologies to reduce costs and improve efficiencies in the environmental arena. Environmental restoration activities include long-term stewardship of capped landfills, groundwater extraction wells, and phytoremediation plantation.

The environmental management work shall be conducted in a safe and cost-effective manner leading to DOE, regulatory and public confidence in cleanup efforts. For assigned program elements, the Contractor will:

- (i) implement comprehensive project management systems to track

progress, maintain regulatory compliance, and increase cost effectiveness of work activities; (ii) involve the participation of DOE, regulators, and other stakeholders in decision making and priority setting of environmental management activities; and (iii) propose, and where assigned, implement cleanup activities commensurate with commercial practices in the areas of cost, ability to implement, schedule and public acceptability. The Contractor shall establish and maintain systems to effectively manage and implement an environmental restoration program in accordance with goals and objectives set forth by the Department. These systems must ensure that the technical approach is consistent with DOE cleanup strategies and in accordance with the current approved baseline; to implement an overall system to effectively and efficiently manage all groundwater and contaminated soil cleanup activities; and to expedite final disposition of facilities requiring decommissioning and decontamination.

(6) Nuclear Programs

To the extent required by the Department, the Contractor will maintain capabilities that support the nuclear fuel cycle and include nuclear fuel development, spent fuel disposition technology development, liquid metal technology, post-irradiation examinations, waste and nuclear material characterization, nuclear waste stabilization development, and development of dry interim storage for spent fuel and other highly radioactive materials. The Contractor will continue to maintain a unique suite of nuclear, radiological, and industrial facilities, as well as operational organizations that support these activities.

(7) Technology Transfer Programs

The Contractor shall contribute to U.S. technological competitiveness through research and development partnerships with industry that capitalize on the Contractor's expertise and facilities. Principal mechanisms to effect such contributions are: cooperative research and development agreements, access to user facilities, reimbursable work for non-DOE activities, personnel exchanges, licenses, and subcontracting.

The Contractor shall cooperate with industrial organizations to assist in increasing U.S. industrial competitiveness, by assisting in the application of energy science and technology R&D. Such cooperation may include an early transfer of information to industry by arranging for the active participation by industrial representatives in the Contractor's programs. Cooperation with industrial partners may include long-term strategic partnerships aimed at commercialization of Laboratory inventions or the improvement of industrial products. The Contractor shall respond to

specific near-term technological needs of industrial companies with special emphasis given to working with the types of businesses identified in the Small Business Subcontracting Plan clause of this contract. The Contractor may also capitalize on its location in the Midwest by developing productive relationships with regional and local companies and through forums such as conferences, workshops, and traveling presentations. It is anticipated that these organizations will be particularly effective participants in the Laboratory's technology transfer activities in promoting a mutually beneficial relationship between DOE and the communities surrounding the Laboratory. Cooperation may also include use by industrial organizations of Laboratory facilities and other assistance as may be authorized, in writing, by the Contracting Officer;

(8) University and Science Education Program

The Contractor shall work with colleges and universities, with special emphasis on Historically Black Colleges and Universities/Minority Institutions, and initiate new programs to enhance science and mathematics education at all levels. The Contractor shall encourage participation by a diverse group of faculty and students in Laboratory programs to bring their talents to bear on important research problems and contribute to the education of future scientists and engineers. The Contractor shall also conduct programs for students and faculty to enrich mathematics and science education. A particular purpose of these programs is to encourage members of under-represented societal groups to enter careers in science and engineering.

The Contractor shall maintain its programs of cooperation with the academic and educational community and with nonprofit research institutions for the purpose of promoting research and education in scientific and technical fields of interest to DOE's programs. This cooperation may include, but is not limited to, such activities as: (i) joint experimental programs with colleges, universities, and nonprofit research institutions; (ii) interchange of college and university faculty and Laboratory staff; (iii) student/teacher educational research programs at the pre-collegiate and collegiate level; (iv) post-doctoral programs; (v) arrangement of regional, national, or international professional meetings or symposia; (vi) use of special Laboratory facilities by colleges, universities, and nonprofit research institutes; or, (vii) provision of unique experimental materials to colleges, universities, or nonprofit research institutions or to qualified members of their staffs.

(9) International Collaboration and National Security

In accordance with DOE policies, and in consultation with DOE, the Contractor shall maintain a broad program of international collaboration in areas of research of interest to the Laboratory and to DOE. The Contractor shall also support the DOE nuclear security mission to reduce threats posed by nuclear and radiological materials through illicit or improper use of nuclear and radiological facilities. This can include the material protection control and accounting program to assist nuclear facilities in Russia and the independent Former Soviet Union countries, as well as the proliferation and threat reduction programs, verification technology, and foreign research reactor fuels program.

(10) Other Programs

The Contractor is responsible for the conduct of such other programs and activities as the Parties may mutually agree, including: (i) The providing of the facilities of the Laboratory to the personnel of public and private institutions for the conduct of research, development, and demonstration work, either within the general plans, programs and budgets agreed upon from time to time between DOE and the Contractor, or as may be specifically approved by DOE. The Laboratory facilities shall be made available on such other general bases as DOE may authorize or approve; (ii) The conduct of research and development work for non-DOE sponsors which is consistent with and complementary to the DOE's mission and the Laboratory's mission under the contract, and does not adversely impact or interfere with execution of DOE-assigned programs, does not place the facilities or Laboratory in direct competition with the private sector and for which the personnel or facilities of the Laboratory are particularly well adapted and available, as may be authorized, in writing, by the Contracting Officer; (iii) The dissemination and publication of unclassified scientific and technical data and operating experience developed in the course of the work; (iv) The furnishing of such technical and scientific assistance (including training and other services, material, and equipment), which are consistent with and complementary to the DOE's and Laboratory's mission under this contract, both within and outside the United States, to the DOE and its installations, Contractors, and interested organizations and individuals; and (v) Research funded by the Department of Homeland Security shall be treated as Department funded research.

(11) Major Laboratory and User Facility Operations:

The Laboratory shall manage and operate major Laboratory and user facilities and develop other user facilities important to DOE missions, such as:

Advanced Photon Source (APS): The APS is a national user facility. The mission of the APS is to produce reliable, tunable x-ray beams for user research. Users at the APS conduct forefront basic and applied research in the fields of material science, biological science, physics, chemistry, environmental, geophysical, and planetary science, as well as x-ray instrumentation. The APS can accommodate as many as 70 beamlines and serves a user community that exceeds 2500 individual industry, government, and university users.

Intense Pulsed Neutron Source (IPNS): The IPNS is a national user facility for neutron scattering experiments. The IPNS provides a dozen neutron scattering instruments, as well as facilities for studying radiation effects. Approximately 250 individual users perform a variety of neutron scattering experiments each year.

Argonne Tandem-Linac Accelerator System (ATLAS): The ATLAS facility is a superconducting accelerator for projectiles heavier than the electron. This facility is a DOE National Collaborative Research Facility open to scientists from all over the world. ATLAS consists of a sequence of machines that produce high precision heavy-ion beams ranging over all possible elements, from hydrogen to uranium, to energies as high as 17 MeV per nucleon and delivered to one of three target areas.

Center for Nano-scale Materials (CNM): The CNM is to create, characterize, and understand the behavior of new functional materials on the nanoscale. The CNM exploits the unique electronic, magnetic, structural, chemical, and optical properties of individual nanostructures and their ordered arrays and includes examining the behavior and fundamental properties of functional nanocomposites of patterned ferroelectric and magnetic films, bio-inorganic hybrids, nanophotonic phenomena, and assisted self-assembly. An APS hard x-ray nanoprobe beamline is part of the CNM.

Electron Microscopy Center (EMC): The EMC is used to conduct materials research using advanced microstructural characterization methods and an Intermediate Voltage Electron Microscope. Research includes microscopy based studies in high thermal conductivity superconducting materials, irradiation effects in metals and semiconductors, phase transformations, and processing related structure and chemistry of interfaces in thin films.

Atmospheric Radiation Measurement (ARM) Climate Research Facility: The ARM Program was created to resolve scientific uncertainties about global climate change with a specific focus on improving the performance of general circulation models used for climate research

and prediction. The ARM Program establishes and operates three field research sites, called Cloud and Radiation Testbeds (CARTS), in several climatically significant locations. Scientists collect and analyze data obtained over extended periods of time from large arrays of instruments to study the effects and interactions of sunlight, radiant energy, and clouds on temperatures, weather, and climate.

Transportation Technology Research and Development (R&D) Center: The Transportation Technology R&D Center brings together scientists and engineers from many disciplines to find cost-effective solutions to the problems of transporting people and goods from one place to another. Argonne's transportation research focuses on three areas: advancing toward an environmentally benign passenger car, from fuel production through recycling of obsolete vehicles; paving the way to safer, cleaner trucks, buses, and locomotives; and improving traffic flow, safety, and security. The management of the Transportation R&D Center and the associated research and development conducted in this facility are major elements of the Energy Efficiency and Renewable Energy Program at the Laboratory.

Many of the research activities at the Laboratory are designed and conducted by university and industry users, with the Laboratory maintaining the facilities and ensuring that provisions are in place to perform the activities safely and effectively.

- (12) Policy, Planning, and Analysis Support. The Laboratory shall conduct analysis activities in support of energy policy issues of concern to DOE, data and model development for projecting energy demand and evaluation of policy impacts as input to DOE's assessment of United States energy strategies.
- (13) Laboratory-Directed Research and Development (LDRD). The Laboratory shall conduct a LDRD program that leverages the Laboratory's scientific expertise and key technologies toward innovations that are applicable to DOE's, and other sponsor's missions. LDRD contributes to the development of scientific staff capability and vitality through the support of new research programs of great merit and potential, bringing important capabilities to serve DOE and other related national needs.
- (14) University and Science Education Programs. The Contractor shall develop and implement programs that utilize Laboratory resources, staff, technological expertise, collaborative and cooperative relationships with other academic and research institutions in order to advance science

education opportunities and to improve the quality of science, mathematics, computing, and technology education in the United States.

- (15) Engineering. The Laboratory shall maintain an engineering and machine shop fabrication capability that supports the focus on state-of-the-art research and development to enhance Laboratory technical strengths and to meet the needs of current and future Laboratory programs.
- (16) Radiological Assistance Program. The Laboratory shall provide health physics/radiological protection expertise and capability in support of the DOE Radiological Assistance Program (RAP) Region 5, which includes the states of Illinois, Indiana, Iowa, Michigan, Minnesota, Nebraska, North Dakota, South Dakota, Ohio, and Wisconsin.

(c) Administration and Operation of the Laboratory.

The Contractor shall manage, operate, protect, maintain and enhance the Laboratory's ability to function as a DOE multi-program laboratory, provide the infrastructure and support activities, support the accomplishment of the Laboratory's missions, and assure the accountability to the DOE under the results-oriented, performance-based provisions of this contract. The Contractor shall implement a broad scope continual self-assessment process to assess the overall performance in, and drive continuous improvement of, Laboratory operations and administration.

- (1) Strategic and Institutional Planning. The Contractor shall conduct a strategic planning process and develop institutional plans and strategic facility plans in consideration of DOE provided planning guidance and strategic planning material to assure consistency with DOE missions and goals and with due regard for Environment, Safety, and Health (ES&H) issues.
- (2) Protection of Workers, the Public and the Environment. The safety and health of workers and the public and stewardship of the environment are fundamental responsibilities of the Contractor. Accordingly, the Contractor shall implement a Laboratory Integrated Safety Management (ISM) system which establishes the environmental, safety, and health processes that support the safe performance of all Laboratory work. The ISM system shall include an Environmental Management System. The ISM system shall be applied to all Contractor activities conducted by or for the Laboratory, through subcontractors or other entities, and shall provide for ES&H oversight of Laboratory and subcontractor operations. The Contractor shall also implement emergency management programs.

- (3) Integrated Safeguards and Security (ISSM). The Contractor shall protect Laboratory assets, personnel, property, and information, to sustain the science mission in a manner commensurate with risks. The Contractor shall conduct a Laboratory Integrated Safeguards and Security Management program to include physical site security, protection of Government property, sound cyber security protections, protection of information, personnel security, and access control for Laboratory staff and visitors, export controls, a counterintelligence program and a comprehensive emergency management program.
- (4) Laboratory Facilities. The Contractor shall manage and maintain Government-owned facilities, both provided and acquired, to further national interests and to perform DOE statutory missions. Recognizing that these facilities are a national resource, these facilities may also be made available, with appropriate agreements, to private and public sector entities including universities, industry, and local, state, and other government agencies. The Contractor shall perform overall integrated planning, acquisition, upgrades, and management of Government-owned, leased or controlled facilities and real property accountable to the Laboratory. The Contractor shall employ facilities management practices that are best-in-class and integrated with mission assignments and business operations. The maintenance management program shall maintain Government property in a manner that (A) promotes and continuously improve operational safety, environmental protection and compliance, property preservation and cost effectiveness, (B) ensures continuity and reliability of operations, fulfillment of program requirements and protection of life and property from potential hazards, and (C) ensures the condition of the assets will be maintained or improved.
- (5) Waste Management. Based on DOE guidance documents, all waste management activities shall be managed in compliance with all applicable regulatory requirements. The Contractor shall provide waste management activities for all waste generated by research, operations and clean-up activities. These activities will include appropriate characterization, treatment, storage, transportation, and disposal. Waste management activities include: (A) timely characterization, consolidation, segregation and storage of waste; (B) treatment that complies with storage and/or disposal criteria; (C) efficient shipment of waste for treatment, storage and/or disposal; (D) maintaining sufficient and compliant waste storage space at the Laboratory to accommodate waste generation and waste backlog; and (E) implementation of an effective waste minimization and pollution prevention programs. Waste management activities will also include disposal of legacy remote-handled transuranic waste. The Contractor shall conduct all research, environmental remediation, and operations activities so that all regulatory

requirements, agreements, and orders related to the generation, characterization, treatment, storage and disposal of hazardous waste are met. Additionally, the Contractor shall implement control systems to assure DOE that waste management costs are included in project and program budgets and that hazardous and radiological waste will not be stockpiled at the site.

- (6) Business Management. The Contractor shall manage an effective integrated system of internal controls for all business and administrative operations of the Laboratory.

- (i) Human Resources Management. The Contractor shall establish and maintain human resource systems which attract and retain outstanding employees, and continually motivate them to achieve high productivity in scientific research and Laboratory operations.

The Contractor also shall create and maintain a Laboratory environment that promotes diversity and fully utilizes the talents and capabilities of a diverse workforce. The Contractor shall seek to recruit a diverse workforce by promoting and implementing DOE and Laboratory goals. Special consideration will be given to Historically Black Colleges and Universities/Minority Institutions as potential resource pools. The Contractor shall also strive to promote diversity in all of the Laboratory's subcontracting efforts with emphasis on the use of the types of businesses identified in the Small Business Subcontracting Plan clause of this contract.

- (ii) Financial Management. The Contractor shall maintain a financial management system responsive to the obligations of sound financial stewardship and public accountability. The overall system shall include an integrated accounting system suitable to collect, record, and report all financial activities; a budgeting system which includes the formulation and executions of all resource requirements needed to accomplish projected missions and formulate short- and long-range budgets; an internal control system for all financial and other business management processes; and a disbursements system for both employee payroll and supplier payments. The internal audit group for the Laboratory shall report to the most senior governing body of the Contractor's parent organization(s).
- (iii) Purchasing Management. The Contractor shall have a DOE-approved purchasing system to provide purchasing support and subcontract administration. The Contractor shall, when directed by DOE and may, but only when authorized by DOE, enter into

subcontracts for the performance of any part of the research work under this contract.

- (iv) **Property Management.** The Contractor shall have a DOE approved property management system that provides assurance that the Government owned, contractor held property is accounted for, safeguarded and disposed of in accordance with DOE's expectations and policies. The Contractor shall perform overall integrated planning, acquisition, maintenance, operation, management and disposition of Government-owned personal and real property, and Contractor-leased facilities and infrastructure used by the Laboratory. Real property management shall include providing office space for the DOE Argonne Site Office as directed by the DOE Argonne Site Office Manager.
- (7) **Legal Services.** The Contractor shall maintain legal support for all contract activities including, but not limited to, those related to patents, licenses, and other intellectual property rights; subcontracts; technology transfer; environmental compliance and protection; labor relations; and litigation and claims.
- (8) **Information Resources Management.** The Contractor shall maintain information systems for organizational operations and for activities involving general purpose programming, data collection, data processing, report generation, software, electronic and telephone communications, and computer security. Contractor shall provide computer resource capacity and capability sufficient to support Laboratory-wide information management requirements. The Contractor also shall conduct a records management program.
- (9) **Support to the Howard T. Ricketts Laboratory (HTRL).** The Contractor shall provide utility services, e.g., electricity, steam, laboratory and domestic water, sanitary and laboratory wastewater treatment, and emergency response services to the HTRL which will be a University of Chicago-owned and -operated biocontainment level 3 facility on a portion of the Argonne site which was leased by DOE to the University. The cost of such utility services will be billed to the University. DOE will from time to time direct the Contractor to undertake functions related to the construction and operations of the HTRL such as preparing invoices, reviewing plans, and coordinating utility connections and other aspects of HTRL construction and operations. The Contractor may perform other activities in support of the HTRL for the University under work-for-others arrangements.

- (10) Support to Other Privately-Owned Facilities at Argonne. The Contractor shall provide utility services and other support as directed by DOE to any privately-owned facility that may be constructed on the ANL Site.
- (11) Other Support. The Contractor shall provide other administrative services necessary for Laboratory operations and logistics support to the DOE Argonne Site Office as requested by the Contracting Officer.

C.5 - PLANS AND REPORTS

The Contractor shall submit periodic plans and reports, in such form and substance as required by the Contracting Officer. These periodic plans and reports shall be submitted at the intervals, and to the addresses and in the quantities as specified by the Contracting Officer. Where specific forms are required for individual plans and reports, the Contracting Officer shall provide such forms to the Contractor. The Contractor shall require subcontractors to provide reports that correspond to data requirements the Contractor is responsible for submitting to DOE. Plans and reports which may be submitted in compliance with this provision are in addition to any other reporting requirements found elsewhere in other clauses of this contract. It is the intention of DOE to consult with the Contractor in determining the necessity, form and frequency of any reports required to be submitted by the Contractor to DOE under this contract.

ATTACHMENT J.9

APPENDIX I

DOE DIRECTIVES/LIST B

**Applicable to the Operation of
Argonne National Laboratory**

Contract No. DE-AC02-06CH11357

ES&H

O 151.1C	11/2/05	Comprehensive Emergency Management System
N 153.2	08/11/03	Connectivity to National Atmospheric Release Advisory Center (NARAC)
O 225.1A	11/26/97	Accident Investigation
O 231.1A Chg. 1	06/03/04	Environment Safety & Health Reporting
M 231.1-1A Chg. 1	09/09/04	Environment, Safety, and Health Reporting Manual
M 231.1-2	08/19/03	Occurrence Reporting and Processing of Operations Information
O 414.1C	06/17/05	Quality Assurance
O 420.1B	12/22/05	Facility Safety
O 420.2B	07/23/04	Safety of Accelerator Facilities
O 425.1C	03/13/03	Startup and Restart of Nuclear Facilities
O 435.1 Chg. 1	08/28/01	Radioactive Waste Management
O 440.1A	03/27/98	Worker Protection Management for DOE Federal and Contractor Employees
O 440.2B	11/27/02	Aviation Management and Safety
O 450.1, Chg. 2	12/07/05	Environmental Protection Program
O 460.1B	04/04/03	Packaging and Transportation Safety
O 460.2A	12/22/04	Departmental Materials Transportation and Packaging Management
M 460.2-1	09/23/02	Radioactive Material Transportation Practices
O 5400.5* Chg. 2	01/07/93	Radiation Protection of the Public and the Environment

O 5480.4* Chg. 4	01/07/93	Environmental Protection, Safety, and Health Protection Standards
O 5480.19 Chg. 2	10/23/01	Conduct of Operations Requirements for DOE Facilities
O 5480.20A Chg. 1	07/12/01	Personnel Selection, Qualification, and Training Requirements for DOE Nuclear Facilities
O 5480.30 Chg. 1	03/14/01	Nuclear Reactor Safety Design Criteria
DOE Std. 1090-2004	June 2004	Hoisting and Rigging Standard

SAFEGUARDS AND SECURITY

O 142.1	01/13/04	Classified Visits Involving Foreign Nationals
O 142.2	01/07/04	Safeguards Agreement and Protocol with the International Atomic Energy Agency
O 142.3	06/18/04	Unclassified Foreign Visits and Assignments
N 203.1	10/02/00	Software Quality Assurance (extended by DOE N 251.40)
O 205.1	03/21/03	Department of Energy Cyber Security Management Program
M 205.1-1	09/30/04	Incident Prevention, Warning, and Response (IPWAR) Manual
M 205.1-2	06/26/05	Clearing, Sanitization, and Destruction of Information System Storage Media, Memory Devices, and Related Hardware Manual
N 205.2	11/01/99	Foreign National Access to DOE Cyber Systems (extended by DOE N 205.16)
N 205.3	11/23/99	Password Generation, Protection, and Use (extended by DOE N 205.16)

N 205.8	02/11/04	Cyber Security Requirements for Wireless Devices and Information Systems
N 205.9	02/19/04	Certification and Accreditation Process for Information Systems Including National Security Systems
N 205.10	02/19/04	Cyber Security Requirements for Risk Management
N 205.11	02/19/04	Security Requirements for Remote Access to DOE and Applicable Contractor Information Technology Systems
N 206.3	11/22/05	Personal Identity Verification
O 470.2B	10/31/02	Independent Oversight and Performance Assurance Program
M 470.4-1, Chg.1	03/07/06	Safeguard Security and Awareness Program
M 470.4-2, Chg. 1	03/07/06	Physical Protection
M 470.4-3, Chg. 1	03/07/06	Protective Force
M 470.4-4	8/26/05	Information Security
M 470.4-5	8/26/05	Personnel Security
M 470.4-6	8/26/05	Nuclear Materials Control and Accountability
M 470.4-7	08/26/05	Safeguards and Security Program References
O 471.1A	06/30/00	Identification and Protection of Unclassified Controlled Nuclear Information (extended by DOE N 251.64).
M 471.1-1, Chg 1	10/23/01	Identification and Protection of Unclassified Controlled Nuclear Information Manual
O 471.3	04/09/03	Identifying and Protecting Official Use Only Information
M 471.3-1	04/09/03	Manual for Identifying and Protecting Official Use Only Information
O 475.1	12/10/04	Counterintelligence Program

N 481.1A	04/21/03	Reimbursable Work for Department of Homeland Security (extended by DOE N 251.62)
O 551.1B	08/19/03	Official Foreign Travel
O 5610.2 Chg. 1	09/02/86	Control of Weapon Data
O 5660.1B	05/26/94	Management of Nuclear Materials

FINANCIAL MANAGEMENT

O 130.1	09/29/95	Budget Formulation Process (extended by DOE N 251.45)
O 413.1A	04/18/02	Management Control Program
O 433.1	06/01/01	Maintenance Management Program for DOE Nuclear Facilities
O 522.1	11/03/04	Pricing of Departmental Materials & Services
O 534.1B	01/06/03	Accounting

OTHER

O 110.3	11/03/99	Conference Management
O 200.1	09/30/96	Information Management Program
O 221.1	03/22/01	Reporting Fraud, Waste, and Abuse to the Office of Inspector General
O 221.2	03/22/01	Cooperation with the Office of Inspector General
O 226.1	09/15/05	Implementation of Department of Energy Oversight Policy
O 241.1A Chg. 1	10/14/03	Scientific and Technical Information Management
O 251.1A	01/30/98	Directives System
O 252.1	11/19/99	Technical Standards Program
O 350.1 Chg. 1	05/08/98	Contractor Human Resource Management Programs (Except as otherwise modified in Appendix A of this Contract)
O 350.2A	10/29/03	Use of Management and Operating or Other Facility Management Contractor Employees for Services to DOE in

the Washington, D.C., Area

N 351.1	04/27/06	Contractor Employee Pension and Medical Benefits Policy
O 412.1A	04/21/05	Work Authorization System
O 413.2B	04/19/06	Laboratory Directed Research and Development
O 413.3 Chg. 1	01/03/05	Program and Project Management of the Acquisition of Capital Assets
M 413.3-1	03/28/03	Project Management for the Acquisition of Capital Assets
O 430.1B	09/24/03	Real Property Asset Management
O 430.2A	04/15/02	Departmental Energy & Utilities Management
O 442.1A	06/06/01	Department of Energy Employee Concerns Program
O 443.1	05/15/00	Protection of Human Subjects
N 450.7	10/17/01	The Safe Handling, Transfer, and Receipt of Biological Etiologic Agents at Department of Energy Facilities (extended by DOE N 450.14)
O 482.1	01/12/01	DOE Facilities Technology Partnering Programs
O 483.1	01/12/01	DOE Cooperative Research and Development Agreements
O 580.1	12/07/05	Department of Energy Personal Property Management Program
O 1340.1B	01/07/93	Management of Public Communications, Publications, and Scientific, Technical, and Engineering Publications
O 1350.1 Chg. 1	03/26/84	Audiovisual and Exhibits Management
O 1450.4	11/12/92	Consensual Listening-In To or Recording Telephone/Radio Conversations
O 5530.1A	09/20/91	Accident Response Group
O 5530.3 Chg. 1	04/10/92	Radiological Assistance Program

* Parts cancelled by new Orders

Note: Additional Manuals may apply